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FOREIGN NEWS ON APPLES

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SUMMARY OF THE APPLE EXPORT SEASON, 1927-28

At the beginning of the 1928-29 apple export season it will be of value to review the principal features of the preceding season. In the following pages Mr. Edwin Smith, fruit specialist of the United States Department of Agriculture in Europe, comments on the 1927-28 apple export trade. He offers a number of suggestions, based on observations made in Europe last season, on the handling of export fruit.

The apple growers of the United States, who generally export between 10 and 15 per cent of the apple crop, but who, during the season 1926-27 exported 17.8 per cent of the boxed apples and 18.4 per cent of the barreled apples, or a total of 18.0 per cent of the entire crop, faced conditions during the autumn of 1927 which made it seem a certainty that exports would experience a marked reduction. The factors pointing in this direction were the outlook for a very light crop of apples in the states of Virginia, West Virginia, Maryland, Pennsylvania and New York, which states normally heavily contribute to export supplies, as well as a national crop of apples which was certain to be one of the lightest in many years. European apple producing countries, such as England, Holland, Switzerland and Germany, were harvesting crops which proved to be very abundant and which were destined to furnish home-grown apples throughout the greater part of the winter. In addition to these circumstances, the Canadian crop of apples, and especially that in Nova Scotia, was more normal than crops throughout the United States, thus enabling Canadian growers to furnish quite a full quota of supplies to British markets.

That the prediction of a lighter export season was justified and later fulfilled is to be seen in the fact that our apple exports for the season 1927-28 amounted to only 1,549,000 barrels or about 10 per cent of the total barrel production, and 5,384,000 boxes or 14 per cent of the total production of boxed apples. Taken together, the United States exported 12 per cent of the light crop of 1927. Tables showing the exports of apples by countries and by customs districts during the last five seasons are shown on pages 12 and 13. The exports were unquestionably heavier than they would have been had not the Pacific Coast states grown

an unusually large proportion of small-sized apples. A feature of note was the early closing of the export season. With barreled apples, this was due to shortage of supplies and high prices in domestic markets; with boxed apples it was due to the earliness and heaviness of the competing crops to arrive from New Zealand and Australia.

History of Barreled Apple Markets

The first arrivals of apples from Virginia realized their usual high prices in the British markets. Growers and shippers in certain districts, accustomed to exporting their early apples, in a large measure overlooked prospective market conditions and, in answer to high prices on light supplies, commenced exporting in their usual manner. The result of this was that supplies were too abundant and met devastating competition from home-grown apples.

Many growers in Virginia, who picked their York Imperials and rushed them off on this early market, realized far less than they might have, had they allowed the apples to remain on the trees until better color was secured and then either sold them locally or placed them in cold storage for winter markets. The domestic prices and the reliable estimates of the national crop should have made this quite clear to all producers. During certain years early apple districts have escaped the destructive competition of late districts by picking their York Imperials, Ben Davis and Staymans relatively early in the season and exporting them before the rush. All conditions pointed toward the conclusion that such a policy would be a mistake last year and these conditions are apt to obtain any year, so that a lesson is provided that should be carefully remembered.

Many apples which were picked early and exported at this season sold at prices from 18/- to 23/- ($4.38 to $5.60) which, had they been allowed to mature and graded U.S. No. 1, would have realized from 27/- to 33/- ($6.57 to $8.03) during mid-winter.

During October the shipments of barreled apples were too heavy and though shipments fell off during the first week in November it was not until November 15 that this was reflected in British prices. During January and February with shipments of barrels from the United States and Canada ranging between 30,000 and 80,000 barrels per week and with the condition of the fruit mostly good, prices remained on a fairly satisfactory parity with prices in the United States.

It may be said that the York Imperial was the most satisfactory American barreled apple of the season. The liberal crop of English Bramley's Seedling apples reduced the British demand for outside cooking apples so that the New York State Rhode Island Greening was not a feature of its usual importance during the season. The crop shortage of New York Baldwins made their appearance in Europe all but negligible, whereas the Baldwin from New England was largely kept for home markets. The Albemarle Pippin met rather serious competition from relatively low-priced Newtowns from California and Oregon, - the reduced prices of the latter being due to

undependable condition. Another feature affecting the export price of this variety was the quantity of the unclassified grade shipped during the early season. After March 1 some good lots were exported and the price of U.S. No. 1, 2½ inch min., was then maintained above 45/- ($10.96).

More Refrigeration Needed

Apple growers and shippers in the states of Virginia, West Virginia, Maryland and Pennsylvania experienced very serious losses during 1927 through deterioration following the shipment of hot fruit. Prices of York Imperial apples in the British markets receded from prices in the neighborhood of 27/- to 30/- ($6.57 to $7.30) to 21/ - to 23/- ($5.11 to $5.60) during October, and even lasting until the first of December owing to the fact that the fruit arrived in Europe in a very weak and, in some cases, decayed condition. During the same weeks this fruit should have experienced no recession in prices.

Most of the buyers in European auctions fully realized that York Imperial apples would advance in price, yet this speculative demand was prevented from having its effect upon the market through the weakness of the fruit. Week after week apples arrived which were not in fit shape to place in cold storage. Practically all fruit had a devitalized, spent appearance which prompted all buyers to move it into consumption as soon as possible. Had this fruit appeared sound and full of life the possibility of making from $1.00 to $1.50 per barrel on markets that were certain to advance would have tempted many to bid up and thus cause prices to advance to rational levels. It is difficult to estimate how great a loss southern shippers suffered through not removing the heat from apples prior to shipment.

The fruit producers throughout the East are faced with a tremendous transportation problem when contemplating present apple shipping methods in the export trade. The trade is so seasonal that steamship companies are not encouraged to provide large additions to their refrigerated space. Even if sufficient refrigerated space were provided fully to take care of the shipping requirements, this would not solve the problem, because it is impossible for refrigeration on board ship to overcome the damage which has been done to fruit through delay in shipping and excessive temperatures while moving inland. Moreover, it is difficult for the ship's refrigerating machinery to remove heat fast enough to give transit temperatures as satisfactory as they should be. With the excessive temperatures which frequently prevail between the orchard and the ship, it would necessitate installing equipment in ships such as would virtually make them pre-cooling plants, if the transoceanic temperature chart were to appear as it should appear.

This brings up the practical question of how the apple industry in eastern states may promptly remove the heat from their apples prior to, or during, initial stages of the fruit's journey to market.

Many of the apple districts in the Pacific Northwest are partially solving this problem by the construction of cooperative cold storage plants which serve the function of pre-cooling early shipments. This is proving very satisfactory to the apple interests of these districts. It is impossible to predict that the apple growers of the Atlantic states would meet with the same degree of success if they were to emulate the policy of the western growers. The western grower or shipper has his consignment moving as individual units after the fruit has been loaded into refrigerator cars and turned over to the railway companies. This is not the case in eastern districts, where the fruit is placed in cars for a short time, then is transferred to steamship holds, there to feel the influence of many other carload consignments.

Thus it is that the eastern grower, who might take infinite pains to pre-cool his apples within twenty-four or thirty-six hours after picking might have all of his efforts and expense vitiated within three days after shipment through the fact that his apples were placed in chambers with much larger quantities of very hot fruit which had not been pre-cooled or refrigerated before arriving at the ship's side. The result would be that the heavier weight of hot fruit would raise the temperature of the chamber and prevent the cool fruit from remaining at its low temperature until the body of the chamber's hold could have its heat removed.

From this it is to be seen that, before pre-cooling can bring to its eastern users its full benefit, it would be necessary for them to treat enough fruit so that entire chambers may be filled with fruit which has been cooled under uniform temperature.

The Use of Iced Cars

Had all growers in Virginia and West Virginia followed the policy of shipping only in iced cars, a great deal of the damage and loss encountered during 1927 might have been avoided. The use of iced cars between the orchards and the port of embarkation is a principle which should be more fully exploited. The increased use of more refrigeration at the shipping end, both in the form of cold storage plants and iced cars, provides the future means of saving eastern growers from the tremendous losses which they have experienced in the past.

Barreled Apple Grades

Virginia made a decided step forward by requiring all apple barrels to be marked with grade designations. As the apples from West Virginia, Maryland and Pennsylvania are catalogued under the heading of "Virginian Apples" in British auction sales, it is possible that the ungraded apples from sources outside of Virginia will cause a conflict in opinion on the part of overseas brokers who have not carefully studied the matter. My observation has been that the appearance of apples from Virginia has been greatly improved and small grounds have been given for the old complaint of "dishonest packing" due to over-facing. However, this has not been true with apples packed in West Virginia, Maryland and Pennsylvania.

Color Requirements

Not enough New York State Baldwins were observed to draw conclusions on the subject of "Grey Baldwins". With York Imperials a mistake is being made by not making the Fancy Grade of commercial importance and furthermore, by not more closely defining the character of the ground color used in the U. S. No. 1 grade.

Pennsylvania was the worst offender during last season in the color of York Imperials, in which the red was usually too pale and the green too dull and deep to give the apples an attractive appearance. The result was that Pennsylvania's Yorks threw much discredit upon U.S. grades when used with fruit barely meeting grade requirements through color of poor character.

Virginia packers may be said to have observed their grading law in a very good manner during the first year of its enforcement. At the beginning of the season a few failed to designate grades but this was soon corrected so that by midseason very few unmarked barrels from Virginia were seen in European markets. In some districts a mistake was made through using the "Virginia Early Export" grade too long after the maturity of the fruit would justify using the "U. S. Commercial" grade. Owing to the splendid quality of fruit packed under "U. S. Commercial" this designation means more to the buyer than "Virginia Early Export".

Barrel Stencils

Apples exported from western New York state are quite universally stenciled in a neat and distinct manner. Other barreled apple districts of the United States are not entitled to this commendation. The marking of a barrel is a very important matter. It discredits a good pack of apples to mark them with an indistinct rubber stamp or with a stencil which leaves blurred or smeared lettering. Clear and regular stenciling gives a package a business-like touch which impresses the buyers. A stencil which fits the barrel head should be used and it should indicate name and address of packer, variety, grade, size and country of origin, in clear-cut lettering. Very frequently indistinct lettering, usually resulting from a rubber stamp, is the cause of barrels being incorrectly catalogued for auction sale. Light in the dock sheds is none too good, especially when ships are discharged at night, so that it is small wonder that poor marking causes many incorrect classifications. The British Merchandise Marks Act will now make better marking more important than ever.

Scald and Shredded Oiled Paper

Scald in barreled apples was much less pronounced than during the 1926-27 season. However, during the end of the York Imperial season many arrivals in a badly scalded condition were observed. Barrels packed with shredded oiled paper showed a very marked degree of scald control. The value of shredded oiled paper was very much more striking that it was during the previous winter. During February barreled apples packed with shredded oiled paper frequently sold for from $1.00 to $1.50 more than the same packer's fruit packed without the paper and arriving badly scalded.

The past season witnessed a great advance amongst British buyers in recognizing the scald controlling influence of shredded oiled paper. A few packers still exported barrels marked "shredded oiled paper" but which had only an inconsequential amount of paper throughout the fruit. This has practically no influence on the actual commercial value of the fruit and always stands as a possible jeopardy to the reputation of this means of scald prevention. Where grading and packing standards are made compulsory by law it should be one of the packing requirements that where barrels are marked to indicate the use of shredded oiled paper not less than a required amount of stated standard of paper shall have been well distributed throughout the package.

Slack Barrels

In reviewing the arrival of barreled apples classified in the Liverpool Fruit Exchange catalogues as "Virginian Apples" during the months of October, 1927 and January 1928, we find that during October 18 per cent of the barrels arrived slack while during January only 13 per cent arrived slack. The percentage of slack barrels during the autumn months is entirely too high. An improvement has followed improved barrels and packing, but as yet practically no attention has been paid to lower fruit temperatures.

It has been clearly demonstrated that the adequate plugging of barrels with fruit, at the time of withdrawal from cold storage during winter months, will very nearly prevent all slacks when fruit and barrels are in good condition. A certain Virginian was exporting his York Imperials out of two different cold storages. Carloads from one storage arrived in Liverpool with practically no slacks. Those from the other had anywhere from 5 to 30 barrels of each carload arriving slack and suffering a depreciation of from 50 to 75 cents per barrel. This was directly traceable to faulty plugging at one warehouse.

It is to be emphasized again that heavy pressing will not prevent slack barrels. As a source of bruising and decay it is apt to aggrevate the trouble. Heavy pressing will not make up for poor barrels, unfastened quarter hoops, and faulty racking, no more than will attention to all of these details prevent slack barrels if the fruit is not kept at low or moderate temperatures.

History of Boxed Apple Markets

The 1927-28 season of boxed apple marketing in Europe was increasingly disappointing to every participant with the possible exception of retailers and a small minority of Oregon Newtown shippers. In the beginning, the crop of California Gravensteins had too many small sizes. Purchases were heavy and apples bought at $2.00 f.o.b. California points lost operators from 50 cents to 75 cents per box, prices in Great Britain ruling from 10/- to 12/- ($2.43 to $2.92) per box instead of the anticipated 15/- to 18/- ($3.65 to $4.38). These were followed with quite a liberal exportation of boxed Gravensteins and Wealthy apples from eastern states,

which should have been kept at home. Jonathans from the Pacific Northwest were rather slow in arriving and shipments which left the Pacific Northwest before the middle of October brought satisfactory prices. By the time Jonathans were arriving in volume via the Panama route Jonathan prices fell away so that operators suffered losses on this variety. December Jonathan prices in Great Britain were from 9/6 to 13/- ($2.31 to $3.16) which was equivalent to an f.o.b. price ranging from 85 cents to $1.60. These values were of course from 50 cents to over $1.00 per box below American values.

From early in December Winesaps fared badly with British prices keeping far below the American parity, not showing operators a profit until the 8th of March. Then for two weeks, owing to a temporary recession in supplies, prices of from 12/- to 15/6 ($2.92 to $3.77) for Extra Fancy showed a small profit. Thereafter the market dropped back to unprofitable levels, the season ending early and lifeless about the first week in April.

Oregon Newtowns Scarce

For two years the Oregon Newtown has, on the whole, been a disappointment to the European trade. In this statement apples from the Medford district are to be excepted, though the volume from this source is too small to change the complexion of the situation as a whole. Medford Newtowns, formerly suffering an unfavorable discrimination, have for two seasons enjoyed a premium in European markets.

Prior to February 2 supplies of Newtowns from Oregon were very light and prices were very high, being mostly from 16/- to 20/- ($3.89 to $4.87) for the Extra Fancy grade. Supplies were too light during December and January and this line was not to be observed in the retail stores. Quite large quantities might have been marketed during this period at satisfactory prices while the apples were in comparatively good condition. The general range of Newtown prices was just as good during February and March but unfortunately by that time the fruit was in a very variable state of soundness. Confidence was taken out of the trade and owing to the varying amount of decay found throughout the cargoes it is safe to say late values suffered a depreciation of two shillings a box under probable December-January prices.

It is true that liberal quantities of Newtowns from California offered more of a competitive factor during December and January than later in the season, but even so, Oregon Newtowns, when in good condition, were always able to realize a premium of from three to four shillings per box over California Newtown prices.

California Newtowns during 1927 presented their best appearance in years and speculative purchases by British operators partially made up for light supplies of Oregon Newtowns during the early winter. Prices ranged mostly between 11/- and 12/- ($2.68 to $2.92) which would be equivalent to about $1.35 to $1.60 f.o.b. Watsonville. Unfortunately, browning appeared earlier and worse than usual, resulting in serious losses toward the end of the season. California Newtowns showed much more scald than is usually

observed on apples from this source. Serious deterioration from these two sources calls for more attention being given to storage temperatures and oiled wraps in the Watsonville district.

Boxed Apples from Virginia

Various packers in Virginia and West Virginia continued their program of exporting (mostly) York Imperials and Delicious packed in boxes. One New Jersey grower exported quite a quantity of Wealthy apples packed in boxes. The character of box packing done in Virginia and West Virginia is deserving of favorable comment. The cheapness of Jonathans and Winesaps from the Pacific Northwest and the relatively good prices realized for good York Imperials in barrels again put the results obtained from box packing in a disadvantageous light. As yet the European auction buyer continues to base his price of boxed York Imperials upon one-third of the ruling price of barrels,- possibly giving a premium of a six pence or shilling when a lot of boxed York Imperials are particularly pleasing.

Continental Markets

Liberal crops of apples in various Continental countries caused their demands for American apples to be postponed until later in the season than in 1926, and resulted in imports being largely limited to boxed apples, excepting in the Scandinavian countries. Hamburg was more predominant than ever, owing to importers at that point investing heavily in supplies of boxed apples.

The Hamburg prices were generally from 2 to 4 marks in advance of British prices but this was due to the fact that supplies included larger sizes, sizes 125 to 163 being in demand in Germany as against 163 to 216 or smaller in Great Britain. Scarcely at any time during the year did the Hamburg prices for the larger sizes appear attractive to American interests so that German supplies were largely in the control of the German owners.

Condition on Arrival

The California Gravenstein crop was frequently reported as being of inferior quality. However, the only concrete evidence of bad condition was occasional instances of bitter pit.

The Jonathan gave an undue amount of trouble. Early arrivals showed rather serious deterioration at the calyx of some apples, and bearing evidence of faulty washing methods. This was mostly of dark discoloration at the base of the sepals, resembling the description of arsenical burning. Later arrivals of Jonathans and other varieties did not show this trouble. The Jonathan, however, was subject to internal breakdown early in the season and this continued to be more violent and in a greater variety of forms than normally is to be expected. In some instances this form of loss was greatly accentuated through American transcontinental shipment under standard ventilation. Export shipments of the earlier varieties should not be handled under standard ventilation.

After the middle of January California Newtowns gave continuous trouble through the form of internal breakdown, generally known as "browning". This was much more serious than usual.

Winesaps generally arrived in very sound condition, though some lots showed serious blue mold decay. Usually these rots were of long standing, individual fruits being from half to wholly decayed, while the general condition of the fruit throughout the box would be hard and exceptionally good. A heavy proportion of these blue mold decays started at the calyx end. Observance of this character of blue mold decay may be said to have been especially striking during the past season.

Perennial canker and anthracnose decay in Newtowns from the Hood River Valley was less pronounced than during the previous winter. Little loss from this cause was experienced until after the first of March, but thereafter the amount of decay observed increased alarmingly from week to week. By March 30 some boxes were examined which had 25 per cent of the apples affected. A marked variation was observed between different carlots in the same ship and even in the same carlots some boxes would be affected badly and others not at all. Usually, it was worse on apples having a devitalized appearance, though in some instances fruit having the freshest, brightest appearance would occasionally have specimens one-quarter or one-third decayed. Unfortunately, the variable occurrence of deterioration made the buyer uncertain of all lots and this caused a general depreciation in values.

One very noticeable feature distinguishing the appearance of this character of decay in Hood River Newtowns throughout the 1927-28 season was in the prevalence of the attack at the stem end. During the past season blossom end attack might be said to be rare, attacks on the sides of fruit being even more common than at the calyx end.

Spray Residue

If our producing districts can maintain and improve upon the progress made in removing excess spray residue with the same degree of export control as was had during 1927-28, this problem is largely solved in export markets. Analyses made in Great Britain showed that some lots of apples did not meet their regulations, though the improvement in the condition of American apples influenced medical officers not to take any drastic action. Certain lots of fruit from Wenatchee, Yakima and Moorestown, New Jersey, were especially called to my attention as carrying excessive amounts of arsenic.

Medical officers in Germany have shown interest in this subject and have presented more of an attitude threatening action than they have of actually taking action. Knowing this, German importers have very wisely adopted the policy of keeping out all apples that might give offense. This unquestionably is the correct position to take on all apples exported to Europe as a whole.

Not one prosecution of a fruit dealer through this cause has come to my knowledge during the past year. I am glad to make this kind of a report, but in so doing I should emphasize that requirements for shipping clean fruit are no less than they have been, because medical officers will continue to be vigilant.

Three-Way Pads

The appearance of apples packed with 3-way corrugated paper pads is very much better than fruit packed without them. Continued observations during the past season of arrivals packed in this manner lead to the following recommendations: All yellow apples should be packed for export with 3-way pads; all soft apples such as Jonathan and Delicious should be so packed; and large sizes of all other varieties should have bruising prevented by this means.

Competition of Russian Apples

Apples grown in Crimea and Turkestan have furnished low-priced competition to American apples in all northern European markets during the past season. The most important period of this competition was during the early winter months, though small lots were held in cold storage and marketed until late March.

Through the Soviet government much greater advance in apple packing methods has been made in these districts than in any other part of Europe. The Northwestern Standard apple box, with attractive label, is used, American packing house equipment has been introduced and a very creditable article has been put upon the market. The foundation of this lies in the good quality of fruit produced in this part of the world,- the cradle of all apple production.

Conflicting reports have come from Russia as to the area devoted to apples and number of bearing and non-bearing trees. First-hand advice from a Russian familiar with the country stated that plantings are not especially new,- only marketing methods being revolutionary.

At present Russian competition (as to price levels) is more serious in Scandinavian markets than in other countries. It requires a smaller volume of low-priced apples to upset market prices in Norway and Sweden than in other apple importing countries.

Marking Apple Packages for Great Britain

At the request of the Canadian and New Zealand governments the Standing Committee appointed by the British Ministry of Agriculture and Fisheries sat in November and December, 1927 for hearings on marking imported apples and pears with country of origin at time of sale, under the Merchandise Marks Act. New Zealand wanted the consumer to be able to

distinguish between apples from Australia and New Zealand, and Canada between Canadian and American or other foreign apples. By mutual consent pears were dismissed from consideration. During the hearings retailers objected to this demand on the grounds that frequently it was impossible for the retailer to know where fruit was grown.

During the month of March the Standing Committee issued their report recommending that an Order in Council should be made prohibiting importation, or exposure for sale wholesale or sale wholesale of fresh apples unless each container bears an indication of origin and that the order should prohibit the exposure of apples for sale by retail unless the apples bear an indication of origin.

This Order in Council was signed July 13, 1928 and will come into effect four months after this date, thus applying to most of the 1928 apple crop. It requires each imported apple container to be marked conspicuously in letters not less than half an inch in height, with the country of origin. Merely marking "Virginia", "New York", or "Oregon" will not answer these requirements, but marking will also have to include "U.S.A." or "United States of America". The term "American Produce" will not meet the British requirements.

Empire Marketing Board

This organization, maintained by grant from the British Government to foster inter-imperial demand and trade, has, during the past year, given due attention to fruits. Through the clearance of marketing intelligence for fruit growers, shippers, importers and distributors, through production and transportation research in inter-imperial fruit industries and through publicity, this organization is playing its part toward making the British Commonwealth of Nations independent of outside sources of fruit. The marking of apples as to the country of origin when offered for sale to British consumers is a feature incidental to this comprehensive program. In due course the effect of this program will have its influence principally upon supplies of apples that in the past have been sought in the United States to fill needs in the United Kingdom.

The degree to which future American apple exports are reduced depends to a great extent upon the quality of fruit furnished. In comestible articles the taste of the consumer and the satisfaction of the tradesman are factors difficult to keep within artificial bounds. In certain lines of American apples a higher degree of perfection is necessary from our producers if the merits of their fruit are not to become faint in their appeal to overseas retailers and consumers.

APPLES: United States exports, by countries, years 1925-1928

Country	Year ended June 30			
	1925	1926	1927	1928
	Barrels	Barrels	Barrels	Barrels
United Kingdom	1,255,079	1,477,171	3,304,918	1,004,452
Germany	19,731	26,822	361,633	27,463
France	52	1,950	3,533	29
Sweden	70,237	85,191	72,378	82,389
Norway	22,675	21,443	28,759	19,987
Denmark	12,140	55,439	150,836	42,105
Other Europe	4,246	12,328	232,222	7,903
Total Europe	1,384,160	1,678,344	4,154,279	1,184,328
Canada	34,439	32,756	157,600	54,579
Mexico	1,999	1,501	2,538	1,735
Australia	0	0	474	49
Cuba	17,545	15,425	18,580	11,325
Brazil	1,177	10,084	7,276	2,436
Argentina	52,722	96,739	118,894	82,239
Other countries	13,182	15,780	23,081	11,860
Total	1,505,224	1,850,639	4,482,722	[illegible]
	Boxes	Boxes	Boxes	Boxes
United Kingdom	3,353,937	2,716,955	3,722,709	2,708,635
Germany	291,068	576,736	1,256,717	756,568
France	1,131	1,277	5,718	548
Sweden	106,269	137,644	196,179	218,211
Norway	88,251	87,521	95,053	101,256
Denmark	31,502	111,133	156,526	143,778
Other Europe	101,006	361,242	729,162	115,755
Total Europe	3,973,164	3,992,548	6,142,064	4,024,781
Canada	443,278	630,696	729,686	541,769
Mexico	118,042	93,683	98,849	75,145
Australia	0	0	3	706
Cuba	60,274	69,202	92,061	60,010
Brazil	109,174	145,807	172,297	115,040
Argentina	99,764	144,358	154,551	226,898
Other countries	284,432	387,226	454,607	339,983
Total	5,088,128	5,463,520	7,844,138	5,384,552

Compiled from Foreign Commerce and Navigation of the United States, and official records of the Bureau of Foreign and Domestic Commerce.

APPLES: United States exports, by customs districts, 1924-1928

Customs district	Year ended June 30				
	1924	1925	1926	1927	1928
	1,000 barrels	1,000 barrels	1,000 barrels	1,000 barrels	1,000 barrels
Maine and New Hampshire	30	69	52	94	51
New York	1,750	1,279	1,640	3,906	1,213
Philadelphia	42	3	1	25	a/
Florida	11	10	12	14	10
San Antonio	a/	a/	a/	1	a/
San Francisco	a/	0	2	a/	0
Oregon	0	0	0	0	0
Washington	1	a/	a/	a/	0
Michigan	20	4	5	17	5
All other	178	140	139	426	70
Total	2,032	1,505	1,851	4,483	1,349
	1,000 boxes	1,000 boxes	1,000 boxes	1,000 boxes	1,000 boxes
Maine and New Hampshire	28	14	34	22	11
New York	3,810	2,367	2,327	2,989	2,212
Philadelphia	13	10	1	2	0
Florida	82	58	66	91	60
San Antonio	70	54	41	49	27
San Francisco	148	264	112	275	405
Oregon	541	1,177	940	1,688	684
Washington	701	588	1,168	1,784	1,366
Michigan	327	213	289	483	315
All other	478	343	486	459	304
Total	6,198	5,088	5,464	7,842	5,384

Compiled from official records of the Bureau of Foreign and Domestic Commerce.

a/ Less than 500 barrels.

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